

The State of New Hampshire **DEPARTMENT OF ENVIRONMENTAL SERVICES**



Thomas S. Burack, Commissioner

Contaminants in fish in Country Pond

There are a number of contaminants in the environment that can affect our health. **Mercury** and **Polychlorinated Biphenyls (PCBs)** are two of them. We can be exposed to these contaminants by eating fish.

PCBs belong to a broad family of man-made organic chemicals known as chlorinated hydrocarbons. PCBs were manufactured in the United States from 1929 until their production was banned in 1979. Once in the environment, PCBs do not readily break down and therefore may remain for long periods of time cycling between air, water, and soil. PCBs can be carried long distances and have been found in snow and sea water in areas far away from where they were released into the environment. As a consequence, PCBs are found all over the world. In New Hampshire PCBs are also present.

PCBs can accumulate in the leaves and above-ground parts of plants and food crops. They are also taken up into the bodies of small organisms and fish. As a result, people who eat fish may be exposed to PCBs that have accumulated in the fish they are eating. PCBs have been shown to cause a variety of harmful health effects such as cancer as well as non-cancer health effects involving the immune, reproductive, nervous, and endocrine systems.

Mercury is a naturally-occurring element found in rocks, soils, and sediments that is released into the environment by human and natural activities. The major source fo mercury in New Hampshire is air emissions from the burning of coal to create electricity. When mercury gets into the air, it can be carried by rain and snow into lakes and rivers, where it is converted into methly mercury (a highly toxic form of mercury) that can build up in fish. Older fish have higher mercury levels than younger fish. Big fish that eat other fish have higher mercury levels. We can become exposed to mercury by eating fish.

For infants, and children, the primary health effect of methyl mercury is impaired neurological development. Methyl mercury exposure in the womb, which can result from a mother's consumption of fish that contain methyl mercury, can adversely affect a baby's growing brain and nervous system. Problems with behavior and the ability to learn, as well as memory, attention, and language difficulties, have been seen in children exposed to methyl mercury in the womb. That is why babies and young children are most at risk.

Fish are an important part of a healthy diet. They are a good source of low fat protein, vitamins, minerals and contain omega 3 fatty acids, a key nutrient for brain development. However nearly all fish contain mercury and other pollutants like polychlorinated biphenyls (PCBs).

PCBs have been found in Country Pond. Mercury is a widespread pollutant in all of New Hampshire waters. Due to their presence here, the state of New Hampshire suggests following the fish advisory below for those fishing in Country Pond. You can eat fish and be healthy, The following guidelines will help.

Children through age 6 and women of childbearing age:

- For large and smallmouth bass, eat no more than 6 meals/year, but no more than 1 meal in any one month.
- For all other fish species in Country Pond such as yellow perch, eat no more than 1 meal /month.

All other adults and children 7 and above:

- For large and smallmouth bass, eat no more than 6 meals/year.
- For other fish species in Country Pond, up to 21 meals/year can be eaten

For more information contact: New Hampshire Department of Environmental Services (603) 271-1370 www.des.nh.gov